

WHAT IS CLAIMED IS

1. A method of treating or inhibiting anti-arrhythmic events in a human comprising administering to said human a liquid pharmaceutical composition comprising a therapeutically effective amount of at least one 3,7-diazabicyclo[3,3,1]nonane compound, or a physiologically acceptable acid addition salt thereof, in a plurality of successive phases.
2. The method of claim 1, wherein said compound is administered in a non-continuous administration.
3. The method of claim 1, wherein said compound is administered in a partially continuous administration.
4. The method of claim 1, wherein said compound is administered in a two-step administration of two continuous administration phases.
5. The method of claim 1, wherein said anti-arrhythmic event is onset of atrial fibrillation or flutter and said method results in conversion of atrial fibrillation or flutter to normal sinus rhythm.
6. The method of claim 1, wherein said compound is present as a solvate or as a prodrug.
7. The method of claim 1, wherein said compound is administered by infusion.

8. The method of claim 7, wherein said compound is administered by stepwise infusion.

9. The method of claim 8, wherein in at least one step, said compound is administered as a partially continuous infusion.

10. The method of claim 7, wherein said compound is administered as a two-step infusion of two continuous infusion administration phases.

11. The method of claim 1 wherein a liquid pharmaceutical composition comprising a first therapeutically effective amount of said 3,7-diazabicyclo[3,3,1]nonane compound, which is sufficient for treating or inhibiting anti-arrhythmic events in humans, is administered over a first time period of from about 8 to about 12 minutes, and a second therapeutically effective amount of said 3,7-diazabicyclo[3,3,1]nonane compound, which is sufficient for continuing the treating or inhibiting, is administered over a second time period of from about 15 to about 25 minutes.

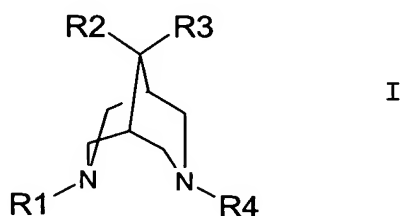
12. The method of claim 11, wherein said compound is administered over a first time period of from about 9 to about 11 minutes.

13. The method of claim 11, wherein said compound is administered over a first time period of from about 9.5 to about 10.5 minutes.

14. The method of claim 11, wherein said compound is administered over a second time period of from about 17 to about 23 minutes.

15. The method of claim 11, wherein said compound is administered over a second time period of from about 19 to about 21 minutes.

16. The method of claim 1, wherein said compound corresponds to Formula I:



wherein

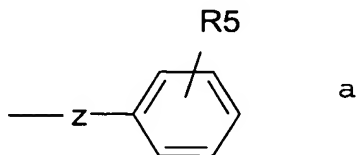
R1 represents an alkyl group containing from 1 to 6 carbon atoms; an alkylene group containing from 3 to 6 carbon atoms having a double bond which is not linked directly to the nitrogen atom; a cycloalkylalkyl group containing from 4 to 9 carbon atoms or a benzyl group;

R2 represents a lower alkyl group;

R3 represents a lower alkyl group or

R2 and R3 together form an alkylene chain containing from 3 to 6 carbon atoms; and

R4 represents an alkyl group containing from 1 to 6 carbon atoms; an alkenyl group containing from 3 to 6 carbon atoms having a double bond which is not linked directly to the nitrogen atom; a cycloalkylalkyl group containing from 4 to 9 carbon atoms; a group corresponding to Formula a:



wherein

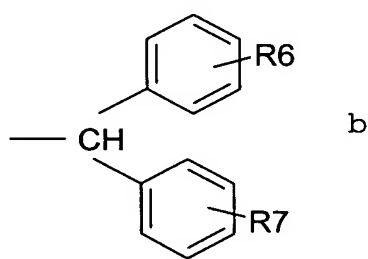
R5 represents hydrogen, halogen, lower alkyl or lower alkoxy, and

Z represents an alkylene chain containing from 1 to 3 carbon atoms;

a propenylene chain having a double bond which is

conjugated with the phenyl group; or

a group corresponding to Formula b:



wherein

R6 represents hydrogen, halogen, lower alkyl or lower alkoxy and

R7 represents hydrogen, halogen, lower alkyl or lower alkoxy.

17. The method of claim 16, wherein R1 represents an alkyl group containing from 1 to 6 carbon atoms or a cycloalkylalkyl group containing from 4 to 7 carbon atoms.

18. The method of claim 16, wherein R4 represents an alkyl group containing from 1 to 6 carbon atoms, a cycloalkylalkyl group containing from 4 to 7 carbon atoms, or a group corresponding to Formula b.

19. The method of claim 16, wherein R1 represents an alkyl group containing from 3 to 6 carbon atoms or a cycloalkylalkyl group containing from 4 to 7 carbon atoms, and R4 represents an alkyl group containing from 3 to 6 carbon atoms or a cycloalkylalkyl group containing from 4 to 7 carbon atoms.

20. The method of claim 16, wherein said 3,7-diazabicyclo[3,3,1]nonane compound is a 9,9-alkylene-3,7-diazabicyclo[3.3.1]nonane compound corresponding to Formula I wherein R2 and R3 together form an alkylene chain containing from 4 to 5 carbon atoms, and R1 and R4 independently of one another each denote a straight-chain or branched alkyl group of 3-4 carbon atoms or a cyclopropylmethyl group.

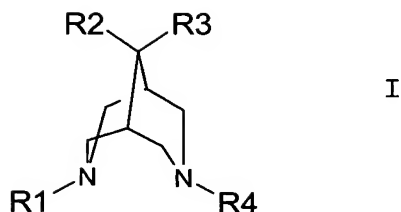
21. The method of claim 20, wherein said 3,7-diazabicyclo[3,3,1]nonane compound is a fumaric acid salt of said 9,9-alkylene-3,7-diazabicyclo[3.3.1]nonane compound containing 1.5 moles of fumaric acid per mole of nonane compound.

22. The method of claim 16, wherein said 3,7-diazabicyclo[3,3,1]nonane compound is selected from the group consisting of N,N'-dicyclopropylmethyl-9, 9-tetramethylen-3,7-diazabicyclo[3,3,1]nonane, and N-isobutyl-N'-isopropyl-9,9-pentamethylen-3,7-diazabicyclo[3,3,1]nonane.

23. The method of claim 22, wherein said 3,7-diazabicyclo[3,3,1]nonane compound is a fumaric acid salt of N,N'-dicyclopropylmethyl-9, 9-tetramethylene-3,7-diazabicyclo[3,3,1]nonane or of N-isobutyl-N'-isopropyl-9,9-pentamethylene-3,7-diazabicyclo[3,3,1]nonane containing 1.5 moles of fumaric acid per mole of nonane compound.

24. The method of claim 16, wherein said 3,7-diazabicyclo[3,3,1]nonane compound is a hydrochloride salt.

25. A pharmaceutical product or package comprising:
a liquid pharmaceutical composition with a therapeutically effective amount of at least one 3,7-diazabicyclo[3,3,1]nonane compound or a physiologically acceptable acid addition salt thereof, wherein said compound corresponds to Formula I:



wherein

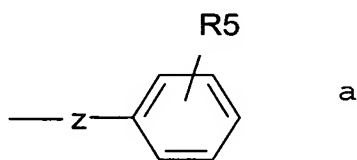
R1 represents an alkyl group containing from 1 to 6 carbon atoms; an alkylene group containing from 3 to 6 carbon atoms having a double bond which is not linked directly to the nitrogen atom; a cycloalkylalkyl group containing from 4 to 9 carbon atoms or a benzyl group;

R2 represents a lower alkyl group;

R3 represents a lower alkyl group or

R2 and R3 together form an alkylene chain containing from 3 to 6 carbon atoms; and

R4 represents an alkyl group containing from 1 to 6 carbon atoms; an alkenyl group containing from 3 to 6 carbon atoms having a double bond which is not linked directly to the nitrogen atom; a cycloalkylalkyl group containing from 4 to 9 carbon atoms; a group corresponding to Formula a:

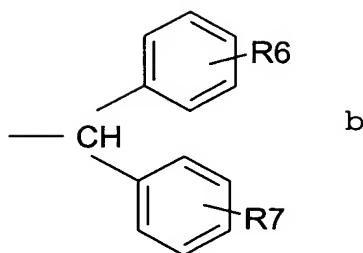


wherein

R5 represents hydrogen, halogen, lower alkyl or lower alkoxy, and

Z represents an alkylene chain containing from 1 to 3 carbon atoms; a propenylene chain having a double bond which is conjugated with the phenyl group; or

a group corresponding to Formula b:



wherein

R6 represents hydrogen, halogen, lower alkyl or lower alkoxy and

R7 represents hydrogen, halogen, lower alkyl or lower alkoxy

and

a label or package insert indicating that said 3,7-diazabicyclo[3,3,1]nonane compound may be administered in a multiphase administration.

26. The pharmaceutical product or package of claim 25, wherein said label or package insert indicates that said 3,7-diazabicyclo[3,3,1]nonane compound may be administered non-continuously.

27. The pharmaceutical product or package of claim 25, wherein said label or package insert indicates that said 3,7-diazabicyclo[3,3,1]nonane compound may be administered partially continuously.

28. The pharmaceutical product or package of claim 25, wherein said label or package insert indicates that said 3,7-diazabicyclo[3,3,1]nonane compound may be administered in a two-step administration of two continuous administration phases.

29. The pharmaceutical product or package of claim 25, wherein said compound is present as a solvate or as a prodrug.

30. The pharmaceutical product or package of claim 25, wherein said label or package insert indicates that said 3,7-diazabicyclo[3,3,1]nonane compound may be administered as an infusion.

31. The pharmaceutical product or package of claim 25, wherein said label or package insert indicates that said 3,7-diazabicyclo[3,3,1]nonane compound may be administered by stepwise infusion.

32. The pharmaceutical product or package of claim 31, wherein said label or package insert indicates that in at least one step, said 3,7-diazabicyclo[3,3,1]nonane compound may be administered as a partially continuous infusion.

33. The pharmaceutical product or package of claim 25, wherein said label or package insert indicates that said 3,7-diazabicyclo[3,3,1]nonane compound may be administered as a two-step infusion of two continuous administration phases.

34. The pharmaceutical product or package of claim 25, wherein said label or package insert indicates that a first therapeutically effective amount of said 3,7-diazabicyclo[3,3,1]nonane compound may be administered over a first time period of from about 8 to about 12 minutes and a second therapeutically effective amount of said 3,7-diazabicyclo[3,3,1]nonane compound may be administered over a second time period of from about 15 to about 25 minutes.

35. The pharmaceutical product or package of claim 34, wherein said first time period is from about 9 to about 11 minutes.

36. The pharmaceutical product or package of claim 34, wherein said first time period is from about 9.5 to about 10.5 minutes.

37. The pharmaceutical product or package of claim 34, wherein said second time period is from about 17 to about 23 minutes.

38. The pharmaceutical product or package of claim 34, wherein said second time period is from about 19 to about 21 minutes.